

AMENDMENTS TO CLAIMS

Claims 1 -13 (canceled)

Claim 14 (currently amended) Method of producing a bending-resistant, elongated body comprising:

Providing an elongated blank having at least ~~one cavity~~ three cavities extending essentially along the entire length of the blank, said at least ~~one cavity~~ three cavities having a longitudinal axis, said at least ~~one cavity~~ three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, the inner surface of ~~which cavity~~ one of said at least three cavities is at a distance from the mass center of the blank seen in a section at right angles to its longitudinal axis and is arranged concentrically around said mass center, the blank being formed from a metallic material; inserting a fiber composite ~~body~~ bodies formed from a plurality of fibers in a non-metallic material into at least one of said first and second openings of the at least ~~one cavity~~ three cavities; and affixing in the ~~cavity~~ cavities the fiber composite ~~body~~ bodies with an outer surface essentially congruent with the inner surface of ~~the cavity~~ said at least three cavities, wherein a majority of fibers in the fiber composite ~~body~~ bodies both extend essentially parallel to the longitudinal axis of the elongated blank and are elongated along the whole of its length.

Claim 15 (currently amended) Method according to claim 14, wherein the step of affixing comprises gluing the fiber composite ~~body~~ bodies into the ~~cavity~~ at least three cavities.

Claim 16 (currently amended) Method according to claim 14, wherein the step of affixing comprises shrinking the ~~cavity~~ at least three cavities to the fiber composite ~~body~~ bodies.

Claim 17 (previously presented) Method according to claim 15, wherein that epoxy-, acrylic-, polyurethane- or phenolic-resin-based adhesive is used for gluing.

Claim 18 (previously presented) Method according to claim 14, wherein carbon fiber in an epoxide matrix, is used as the fiber composite body.

Claim 19 (previously presented) Method according to claim 16, wherein the step of producing the blank produces a blank that is a shaft with a number of longitudinal cavities, which are arranged with equal pitch, symmetrically around the mass center of the blank seen in a section at right angles to its longitudinal axis.

Claim 20 (currently amended) A bending-resistant, elongated body wherein the elongated body has at least ~~one cavity~~ three cavities extending essentially along the whole of its length, said at least ~~one cavity~~ three cavities having a longitudinal axis, said at least ~~one cavity~~ three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, an inner surface of ~~which cavity~~ one of said at least three cavities is at a distance from the body's mass center seen in a section at right angles to its longitudinal axis and is arranged concentrically around said mass center, with a fiber composite ~~body~~ bodies formed from fibers in a non-metallic binder having an outer surface which is essentially congruent with the inner surface of the ~~cavity~~ at

least three cavities is affixed in the ~~eavity~~ cavities, wherein a majority of fibers in the fiber composite ~~body~~ bodies both extend essentially parallel to the longitudinal axis of the elongated body and are elongated along the whole of its length and the elongated body is formed from a metallic material.

Claim 21 (previously presented) The bending-resistant, elongated body of claim 20, wherein the fiber composite body consists of carbon fiber in an epoxide matrix.

Claim 22 (currently amended) The bending-resistant, elongated body of claim 20, wherein the outer surface of the fiber composite ~~body is~~ bodies are joined to the inner surface of the ~~eavity~~ cavities by means of an adhesive.

Claim 23 (previously presented) The bending-resistant, elongated body of claim 22, wherein the adhesive is epoxy-, acrylic-, polyurethane-, or phenolic-resin-based.

Claim 24 (currently amended) The bending-resistant, elongated body of claim 20, wherein the outer surface of the fiber composite ~~body is~~ bodies are joined to the inner surface of the ~~eavity~~ cavities by shrinking:

Claim 25 (previously presented) The bending-resistant, elongated body of claim 20, wherein the elongated body with longitudinal cavities comprises an extruded profile beam or a tube.

Claim 26 (previously presented) The bending-resistant, elongated body according to claim 20, wherein the elongated body (1) is a shaft having a number of longitudinal cavities distributed with

an equal pitch symmetrically around its mass center seen in a section at right angles to its longitudinal axis.

Claim 27 (currently amended) A method for producing a bend-resistant, elongated body, the method comprising:

forming an elongated blank having at least ~~one cavity~~ three cavities extending essentially along the entire length of the blank, said at least ~~one cavity~~ three cavities having a longitudinal axis, said at least ~~one cavity~~ three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, the inner surface of ~~the cavity~~ one of said at least three cavities being at a distance from the mass center of the blank seen in a section at right angles to its longitudinal axis and ~~that of the cavity,~~ ~~said inner surface being~~ arranged concentrically around said mass center, the blank being formed from a metallic material;

forming a fiber composite ~~body~~ bodies from fibers extending essentially parallel to the longitudinal axis of the fiber composite body and extending essentially along the length of the fiber composite body by inserting said fiber composite ~~body~~ bodies into at least one of said first and second openings, the fibers embodied in a matrix; and

affixing an outer surface of the fiber composite ~~body~~ bodies to the inner surface of the ~~cavity~~ cavities of the elongated blank.

Claim 28 (currently amended) The method of claim 14 wherein the outer surface of the fiber composite ~~body is~~ bodies are affixed to the inner surface of the ~~cavity~~ cavities by gluing.

Claim 29 (previously presented) The method of claim 14, wherein said fiber composite body is tubular having a central bore devoid of fibers.

Claim 30 (previously presented) The bending-resistant, elongated body of claim 20, wherein said fiber composite body is tubular and has a central bore devoid of fibers.

Claim 31 (currently amended) A spindle for carrying paper reels, said spindle comprising a bending-resistant, elongated body wherein the elongated body has at least ~~one cavity~~ three cavities extending essentially along the whole of its length, said at least ~~one cavity~~ three cavities having a longitudinal axis, said at least ~~one cavity~~ three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, an inner surface of ~~which cavity~~ one of said at least three cavities is at a distance from the body's mass center seen in a section at right angles to its longitudinal axis and is arranged concentrically around said mass center, with a fiber composite ~~body~~ bodies formed from fibers in a non-metallic binder having an outer surface which is essentially congruent with the inner surface of the ~~cavity is~~ cavities are affixed to the ~~cavity~~ cavities, wherein the majority of fibers in the fiber composite ~~body~~ bodies both extend essentially parallel to the longitudinal axis of the elongated body and are elongated along the whole of its length and the elongated body is formed from metallic material.

Claim 32 (new) Method according to claim 16, wherein the step of producing the blank produces a blank that is a beam with a number of longitudinal cavities, which are arranged asymmetrically around the mass center of the blank seen in a

section at right angles to its longitudinal axis, so as to produce varying bending resistance in different directions of applied force.

Claim 33 (new) The bending-resistant, elongated body according to claim 20, wherein the elongated body (1) is a beam having a number of longitudinal cavities distributed asymmetrically around its mass center seen in a section at right angles to its longitudinal axis, so as to produce varying bending resistance in different directions of applied force.

Claim 34 (new) A method of producing a bending-resistant, elongated body with a predetermined desired natural frequency, comprising:

forming an elongated blank having at least three cavities extending essentially along the entire length of the blank, said at least three cavities having a longitudinal axis, said at least three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, the inner surface of one of said at least three cavities being at a distance from the mass center of the blank seen in a section at right angles to its longitudinal axis and arranged concentrically around said mass center, the blank being formed from a metallic material, the remaining cavities spaced at an equal pitch, symmetrically around the mass center of said blank, at a specific distance from said mass center of said blank, whereby said specific distance determines said natural frequency of said body;

forming fiber composite bodies from fibers extending essentially parallel to the longitudinal axis of the fiber composite body and extending essentially along the length of the fiber composite body by inserting said fiber composite bodies

into at least one of said first and second openings, the fibers embodied in a matrix; and

affixing an outer surface of the fiber composite bodies to the inner surface of the cavities of the elongated blank.

Claim 35 (new) A method of producing an elongated beam possessing predetermined desired bending resistance in different directions of applied force, comprising:

forming an elongated blank having at least three cavities extending essentially along the entire length of the blank, said at least three cavities having a longitudinal axis, said at least three cavities being enclosed in said blank but for first and second spaced openings at opposite ends of said longitudinal axis, the inner surface of one of said at least three cavities being at a distance from the mass center of the blank seen in a section at right angles to its longitudinal axis and arranged concentrically around said mass center, the blank being formed from a metallic material, the remaining cavities asymmetrically around the mass center of said blank, where said asymmetric pattern creates desired bending resistance in different directions of applied force;

forming fiber composite bodies from fibers extending essentially parallel to the longitudinal axis of the fiber composite body and extending essentially along the length of the fiber composite body by inserting said fiber composite bodies into at least one of said first and second openings, the fibers embodied in a matrix; and

affixing an outer surface of the fiber composite bodies to the inner surface of the cavities of the elongated blank.